SZS&Z Ref. No.: IO031108PUS Atty. Dkt. No. INFN/SZ0028

## REMARKS

This is intended as a full and complete response to the Final Office Action dated May 12, 2006, having a shortened statutory period for response set to expire on August 12, 2006. Applicant submits this response to place the application in condition for allowance or in better form for appeal. Please reconsider the claims pending in the application for reasons discussed below.

Claims 2-5, 8-19 and 22-27 are pending in the application. Claims 2-5, 8-19 and 22-27 remain pending following entry of this response. Claims 4, 11, and 24 have been amended. Applicant submits that the amendments do not introduce new matter.

## Claim Rejections - 35 U.S.C. § 102

Claims 2-5, 8-15, 17, and 22-24 are rejected under 35 U.S.C. 102(e) as being anticipated by *Kiehl* (US 6,492,836 B2).

Applicant respectfully traverses this rejection.

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). "The identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). The elements must be arranged as required by the claim. *In re Bond*, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990).

In this case, *Kiehl* does not disclose "each and every element as set forth in the claim". For example, with respect to claims 2, 8, 22 and their dependents, *Kiehl* does not disclose "a current source transistor for delivering a compensating current to the output node, the current source transistor having a control terminal which is controlled independent of the intermediate voltage signal."

The Examiner argues that four transistors 226, 228, 230 and 232 in *Kiehl* are the current source transistors recited in the claims. However, the control electrodes of the transistors 226 and 228 are dependent on the voltage present at node 220, which was identified by the Examiner to carry the intermediate voltage signal. (See *Kiehl*, Figure 2A). Thus, transistors 226 and 228 cannot be current source transistors as recited in

the claims, because transistors 226 and 228 are dependent on the intermediate voltage signal. Therefore, transistors 226 and 228 are not current source transistors within the meaning of the claims.

Furthermore, the Examiner argues that transistors 230 and 232 are current source transistors according to the claims. The Examiner also argues that the node designated as OUT in Figure 2A of *Kiehl* is equivalent to the output node in the claims. However, the transistors 230 and 232 are not connected to the OUT node, rather transistors 230 and 232 are connected to the gate terminals of transistors 226 and 228, and therefore are isolated from the OUT node. (See *Kiehl*, Figure 2A). Thus, contrary to the requirements of the claim, transistors 230 and 232 are not used "for delivering a compensating current to the output node"; rather, transistors 230 and 232 are merely used to trigger or "turn-on" transistors 226 and 228.

The Examiner further argues that the transistor 230 of *Kiehl* delivers a compensating current "across" transistor 226 to the OUT node of Figure 2B. Applicant respectfully disagrees. The transistor 230 is connected to the gate terminal of transistor 226. (See *Kiehl*, Figure 2A) Although the drain of transistor 226 is connected to the OUT node, it is commonly known to one skilled in the art that a current, such as that delivered by transistor 230, cannot flow "across" the gate of a field effect transistor to the drain of the field effect transistor. Thus, transistor 226 does not deliver the current provided by transistor 230 at the gate of transistor 226 to the OUT node, because the current from transistor 230 is isolated from the OUT node by the gate of transistor 226. Therefore, it is believed that the statement that the current source transistor 230 delivers a compensating current "across" transistor 226 to the output node is not technically justified in view of the fact that transistor 226 is a field effect transistor having an isolated gate electrode.

Therefore, claims 2, 8, 22 and their dependents are believed to be allowable, and allowance of the claims is respectfully requested.

Regarding claim 13, *Kiehl* does not disclose "each and every element as set forth in the claim". For example, with respect to claim 13 and its dependents, *Kiehl* does not

disclose "a first current mirror circuit having a first branch and a second branch coupled to the output node, the second branch delivering a current to the output node."

The Examiner argues that transistor 230 may be considered the second branch of a current mirror, the first branch being shown in Figure 2C of *Kiehl*. Furthermore, the Examiner argues that mirrored current from transistor 230 is delivered to the OUT node, via transistor 226. Applicant respectfully disagrees. As stated above, the drain of transistor 230 is connected to the gate of transistor 226. (See *Kiehl*, Figure 2A) Thus, the current from the mirror circuit is not delivered to the output node, rather the mirror circuit current in *Kiehl* is merely used to trigger transistor 226. Therefore, *Kiehl* does not teach the claim limitation of "a first current mirror circuit having a first branch and a second branch coupled to the output node, the second branch delivering a current to the output node."

Therefore, claim 13 and its dependents are believed to be allowable, and allowance of the claims is respectfully requested.

Regarding claim 4 as amended, *Kiehl* does not disclose "each and every element as set forth in the claim". Furthermore, Applicant notes that the amendments have been made solely for the purposes of clarification and introduce recitations already present in other unamended claims. Accordingly, further search or consideration is not believed to be necessary.

With respect to claim 4, *Kiehl* does not disclose a "current is mirrored to the output node by the compensating current source." The Examiner argues that a current mirror is disclosed in *Kiehl* in Figure 2C in conjunction with transistor 230. Even if the circuit consisting of the transistor 230 and the circuit in Figure 2C is considered a current mirror, a current provided by the resulting circuit is not mirrored to the output node as recited by claim 4. Rather, the drain of transistor 230 is connected to the gate of transistor 226. Therefore, the current from transistor 230 is isolated from the OUT node by the gate of transistor 226. Thus, the current from transistor 230 is not "mirrored to the output node by the compensating current source" as required by the claim language; rather, any current or signal from transistor 230 is merely used to trigger or "turn on" transistor 226.

SZS&Z Ref. No.: IO031108PUS

Atty. Dkt. No. INFN/SZ0028

Therefore, claim 4 and its dependent claim 5 are believed to be allowable, and allowance of the claims is respectfully requested.

Regarding claims 11 and 24 as amended, Kiehl does not disclose "each and every element as set forth in the claim". Furthermore, Applicant notes that the amendments have been made solely for the purposes of clarification and introduce recitations already present in other unamended claims, therefore no further search is necessary.

With respect to claims 11 and 24, Kiehl does not disclose a "wherein the first compensating current source comprises a first current source transistor, a current flowing through the first current source transistor supplementing a current flowing from the output node through the NMOS transistor as a function of PMOS current drive, the first current source transistor having a control terminal which is controlled independent of the intermediate voltage signal." As presented in the arguments above with respect to claims 2, 8, and 22, nowhere in Kiehl is a current source transistor disclosed which supplements current flowing from the output node and is controlled independent of the intermediate voltage signal.

Therefore, claims 11 and 24 are believed to be allowable, and allowance of the claims is respectfully requested.

PATENT

SZS&Z Ref. No.: IO031108PUS Atty. Dkt. No. INFN/SZ0028

## Conclusion

The secondary references made of record are noted. However, it is believed that the secondary references are no more pertinent to the Applicant's disclosure than the primary references cited in the office action. Therefore, Applicant believes that a detailed discussion of the secondary references is not necessary for a full and complete response to this office action.

Having addressed all issues set out in the office action, Applicant respectfully submits that the claims are in condition for allowance and respectfully requests that the claims be allowed.

If the Examiner believes any issues remain that prevent this application from going to issue, the Examiner is strongly encouraged to contact the undersigned attorney to discuss strategies for moving prosecution forward toward allowance.

Respectfully submitted, and S-signed pursuant to 37 CFR 1.4,

/Gero G. McClellan, Reg. No. 44,227/
Gero G. McClellan
Registration No. 44,227
PATTERSON & SHERIDAN, L.L.P.
3040 Post Oak Blvd. Suite 1500
Houston, TX 77056

Telephone: (713) 623-4844 Facsimile: (713) 623-4846 Attorney for Applicant(s)